VOLUME 26 NUMBER 9

DAKOTA HORTICULTURE

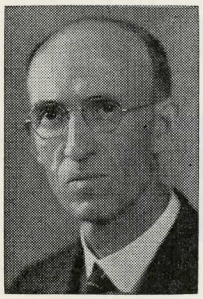
SEPTEMBER, 1953

This is Peter Holand, Grand Forks, winner of the big tree contest, sponsored by the Park Board. The tree is located near the river bank where it doesn't have to worry about the long time between drinks. A sizable cottonwood tree growing North Dakota style. Be sure to attend the North Dakota Annual meeting at Mandan, October 2nd and 3rd. *See Mr. Graves' article.*

THE TRUMPETER SWAN

by

O. A. STEVENS



O. A. Stevens

Trumpeter swans and whooping cranes would seem to make up a noisy company. Since the story on the cranes was written an article on them has appeared in the August number of North Dakota Outdoors. It was written by R. P. Allen as a plea for help in saving the few remaining birds and gives some further details on their history.

The trumpeter swan is another large species that has not fared too well. Its days of abundance are not so far back but they are associated with the frontier and records are scant. One naturalist in Montana could find but two or three records for the years 1912-14. Another writer of the same period found that there were only 16 specimens preserved in museums. One of these was secured in North Dakota in 1891.

Records of the birds nesting in Minnesota are few though they originally nested there in some numbers. The ornithologist with the Pacific Railroad Survey in 1853 recorded that he secured a specimen at Pike Lake where they were quite common. Dr. Roberts discussed a number of reports, discarded several as based upon whistling swans and retained two from the years 1883-85. The swans nested as far south as Iowa up to about 1875. The smaller but similar whistling swan still migrates through our region but has always nested farther north, mostly north of the Arctic Circle.

In North Dakota, Elmer T. Judd of Cando, regarded the trumpeter as a tolerably common migrant in the ninties, though seldom more than four or six birds seen. Alfred Eastgate maintained that they nested in that county in 1895. Lee Pettibone at the Slade place near Dawson, Kidder County, reported two birds on April 25, 1928. About 125 whistling swans were there at the same time but the trumpeters kept by themselves.

The birds do not nest so far north as the whistling swans but often spend the winter quite far north. Gabrielson in 1946 reported 300 birds wintering on Alaskan islands. Christmas counts for 1949 reported 17 birds at Ruby Lake, Nevada only. None were seen there nor at any Pacific Coast locations in 1950, 1951 or 1952. British Columbia is believed to be one of their main locations.

POEMS

by

MARY LOUISE KINYON

IT'S A FACT

When you start eating—just for health
Find you are tired of gathering wealth,
A little too old for a last romance;
The rest of your life hasn't a chance,
It will be dull—believe me.

A HERMIT RELAXES

Fire flys in a swamp at night
The croakings of a frog
Tree toads singing cause its dry
The barking of a dog.
All these are music to my ears,
I need no television
I settle back and light my pipe
Ah—this is really living.

LOVELY WOMAN

Over the past several months Carl Huboi has written what many plants and things related thereto are made of. Now we find what woman is made of. Symbol—WO, member of the human family. Specific Gravity—Molecular structure, extremely variable. Occurrence—Can be found anywhere man exists. Physical properties—All sizes and shapes. Generally appears in disguised condition, natural surfaces rarely free from extraneous coverings of textiles or film of grease or pigments. Melts readily when properly treated. Boils at nothing and may freeze at the moment. Ordinarily sweet, occasionally sour and sometimes bitter. Chemical properties—exceedingly volitile, highly flammable and dangerous in the hands of an inexperienced male. Possesses great affinity for gold, silver, and precious stones of all kinds. Capable of absorbing astonishing quantities of expensive beverages and foods. Reacts violently when left alone. Turns green often.—THE EARTHWORM.

SEPTEMBER, 1953

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NEWSLANTS

by

HARRY GRAVES

Graves

Horticultural highlight for the month of August in these parts was the meeting of the Great Plains Horticulturists at the Dominion Experimental Farm at Morden, and Skinner's Nursery Ltd. of Dropmore, both in Manitoba. Since I had previous committments for the dates the tour spent at Dropmore, my report to you will have to be confined to the days spent at Morden.

First, a bit of background on the Morden Station itself.

Except for a 13-acre railroad right-of-way, the Station covers a section of land. The soil of the station first felt the plow in 1874. The Station was established on a half section in 1914. First plantings were made in 1916. The second half section was purchased in 1929. North Dakota lies 12 miles to the south. Winnipeg is about 74 miles northeast. The Pembina Hills begin about one and one-half miles to the west.

Soil reaction is mostly neutral. The average elevation at the Station is 970 feet.

Horticultural activity occupies 250 of the 627 acres of the Station. Fruits take up 150 acres; arboretum 50 acres; vegetable crops 10 acres; ornamental plants, drives, special gardens, etc., about 40 acres.

Grounds, as usual, were well kept. Rainfall was somewhat lacking in recent days, but the season in general had been kindly. As anyone who has visited the Station knows, there is just too much to be seen to try and cover it in two and one-half days, but we tried.

Programs were well planned and Secretary Charles Walkof kept events moving on schedule. The Ladies Auxiliary of the Morden Station served an excellent noon lunch in the picnic grove on Monday. First on the menu was a generous glass of juice of the Nanking cherry, *Prunus tomentosa*. Anyone who has never been exposed to this drink just hasn't tasted everything until he, or she, has. It has a very rich, full flavor, and when slightly laced with ginger ale, it lingers long in a persons memory.

The annual banquet on Tuesday night was replete with produce of the Morden Station. Sugar Prince sweet corn ranks with the best. The new Manota potato, named recently by the University of Manitoba, drew favorable comments. Heyer No. 12 apple was used in the apple pie we had for dessert. No complaints were heard.

Good as the food was, the two piano solos by Shirley Walkof were better. Shirley, the oldest daughter of Mr. and Mrs. Charles Walkof, has won province wide recognition for her musical talents.

The sessions were honored by the presence, as usual, of Professor Wm. Alderman who recently retired as head of the Department of Horticulture at the University of Minnesota. Professor Bill who leaves soon for a one year foreign assignment was presented with a handsome desk set in appreciation of his contributions to Great Plains Horticulture and our Great Plains Section organization.

Random items from my smudgy notes taken on the various tours: Merion 127 looked the best in the lawn grass experiments — new Lythrum seedlings show promise, Selection No. 2 is tall and growthy, Selection No. 8 is more dwarfish and thick set, it also has more foliage, leaves and broader—Pink Bee Balm, the result of a cross between *Monarda fistulosa* and Cambridge Scarlet, is a perennial one would never hoe out of the border—Pink Sensation, a hybrid delphinium, is a good thing and hardy at Morden—Remember to listen to A. R. (Art) Brown, "The Prairie Gardener," on Radio Station CBW, Winnipeg, at 9:15 Sunday mornings—The Rescue variety of apple-crab needs more emphasis, a seedling of Blush Calville, Rescue makes a good companion variety to Trail which is later—Battleford is a hardy apple from the orchards of Mr. Boughen of Valley River—Kerr, an apple crab selection made at Morden, came from the cross, Dolgo x Haralson. Fruit is about three times the size of Dolgo and somewhat later. Kerr has Dolgo's good red color, is hardy with little if any tip killing.

The Choremaster, a one-wheeled, power driven garden hoe, looks like the best answer to my several attempts to garden without physical effort.

The Fruit and Vegetable Products Laboratory at the Morden Station under the direction of Dr. Lawrence Shewfelt reported some interesting findings. They include:

1. Manitoba-grown sorghum can be expected to yield 100 gallons of syrup per acre. Seven gallons of sorghum sap equal 1 gallon syrup.
2. Frozen spinach can be a delightful product if blanched in water at 190° F. rather than in boiling water.
3. The threshed heads of sunflowers contain approximately 15 per cent of extractable jellying pectin.
4. Top notch Golden Wax beans contain 50 per cent more vitamin C than other commonly grown snap varieties.
5. The jelly yield from crabapples can be increased by as much as 50 per cent by freezing the crabapples prior to extraction.
6. The quality of many fruits and vegetables is influenced measurably by the prevailing moisture conditions during maturation.

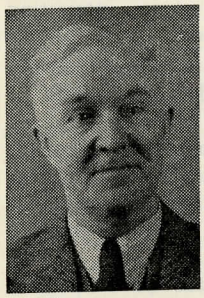
The North Dakota Horticultural Society has scheduled an official meeting at Mandan on October 2 and 3, 1953. We can't call it an annual meeting because we haven't always met every year. In connection we plan to stage a state wide, non-competitive fruit show. Any member who has some good fruit, send six fruits, to me at the Lewis & Clark Hotel at Mandan to arrive on or slightly before October 1. Put in a slip with the variety name if known. If a seedling of your own raising, say so—or if unknown just label "unknown." Be sure to include your name and address. In addition to sending in your fruit come one and all. We are planning a good program and at least 100 plates of fruit are promised barring accidents. The exhibit will be open at 9:00 a.m., October 2. A tour to points of horticultural interest is planned for Saturday morning, October 3.

Nicholas Murray Butler: "If a man's curve of efficiency is ascending at 45, and keeps on ascending just after that period, it may well move upward for his whole life; but if there is a turn downward at 45, he will never recover."

MANITOBA NEWS LETTER

by

W. R. LESLIE



W. R. Leslie

The HOME GROUNDS in the town or city become a repsonsible part of the community. The landscaping of the grounds is capable of enhancing the attractiveness of the house in which the family resides. Treatment should be such that the residence fits comfortably and harmoniously into its setting.

The grounds of all home properties, large or small, are composed of three areas. These are (1) the approach or public area, (2) service area, and (3) private or garden and recreational area.

Approach area is the land from the front of the house to the sidewalk. Treatment is to be relatively simple and dignified. In most instances 5 to 7 different types of shrubs are ample furnishings for this front garden. Several bushes of each type are set in a group to give a mass effect. So arranged, the result is one of cosiness, while plants set widely apart as specimens are less homey. The several groups are selected so that they blend well with one another. A general guide as to spacing is that an individual plant be allowed room equal to about one-half its mature height.

Small properties should be planted with small-growing rather than large trees. Among such are Rosybloom crabapples, Amur maples, Amur lilacs and Hawthorns. Shrubs with thin branches and twigs are clothed with smallish foliage are preferred. Examples are Spireas, Barberries, Potentillas, Cotoneaster, Mockorange, and Roses. In contrast, employment of robust plants with stout branches and large leaves, as lilacs and elders, impart a heavy appearance and cause the small lot to appear smaller.

The aim in planting the approach area is to develop a picture in which the house is set pleasingly as the center of attention. Architectural features of the building are emphasized by having an interesting plant, or plants, growing close to each. Enframement is secured by placing a relatively large tree at each rear corner of the house and by planting shrubbery out from the front corners and to the side boundaries. The shrubbery will extend forward along the edge of the property only two-thirds the distance from the house to the sidewalk. This makes for more spaciousness and a wider outlook from the house.

The front lawn is left open, unmarred by flower beds or shrubs. These are fittingly set along the sides of the lawn. Preferred shrubs have dark or medium green foliage. Subjects with golden, bright red, or variegated leaves are not suited to a small front yard. Similarly, strikingly colorful trees, such as Cutleaf Weeping White Birch and Koster Blue Spruce, are to eye-commanding for the approach to the home. The house is to hold the dominant interest, unchallenged by any spectacular plantings.

The PRIVATE, or *Garden and Recreational* area, serves as the outdoor livingroom. Here is the place for favorite trees, shrubs, vines and flowers. There need be no particular restraint in choice. Such commanding objects as silvery Spruce, Russianolive, and White Birch are acceptable. Consideration should be given to selecting woody ornamentals which will maintain interest not only in spring and summer but also during autumn and winter. In that category are evergreens, trees and shrubs with highly colored bark, and from shrubs and vines which retain their fruits or distinctive seed well into winter, or even into spring, when the new year brings forth a fresh issue of leaves and flowers.

A living-room entrance into the recreational area is desirable. Lacking a door, a large window of the living-room should overlook the garden. This unit of the home grounds is usually treated in an informal fashion. That is, treatment is intermediate between the formal and the naturalistic types. The boundary of the lawn is of long flowing lines. Trees and shrubs are grouped on the sides and end. Flowers are placed as masses in borders set in the bays of shrubbery. Vines are chosen to provide the archway and pergola with draperies.

Landscaping is planned to provide a balance of interest on the two sides of the main vista. Although there is to be a general balance, regular symmetry is not usually desirable. Outlines and plant masses are made more or less irregular. Variation of depth of curves and in the skyline formed by the tops of trees and shrubs, adds to the character of the garden. An objective is to make the utmost employment of space while avoiding all impression of crowding.

Homemakers may wish to add interest by using some *garden accessories.* Among such are a pool, summerhouse, pergola, sundial, bird-bath, bird-feeding station, seats, swing, and rock garden. The outdoor living-room is the logical setting for these. Mostly they are located near the borders in prominent places rather than scattered about the lawn. The sundial requires a sunny exposure. The bird-bath should be in a secluded spot but visible from the living-room window.

Flower borders deserve thoughtful planning. Interest should commence in April and be continued steadily until late October. The bold little blue Siberian Squill ushers in the flower season and Michaelmas Daisies are the last to fade. In between are Tulips, Iris, Pinks, Gasplant, Peonies, Lupins, Daylilies, Gaillardia, Larkspurs, Lilies, Babysbreath, Lythrum, Scabious, Coneflowers, Chrysanthemums and

(*Continued on page 73*)

YOUR YARD AND GARDEN

by

LEONARD YAGER
Extension Horticulturist
Montana Extension Service

Yager

Landscaping Requires Planning

One of the important failures on the part of many gardeners in their gardening endeavors is their inability to recognize the importance of design in the development of beautiful gardens. They place emphasis on growing beautiful individual plants but give no thought to the possibilities that the combination of various plant materials have in the creation of a beautiful landscape picture.

A landscaped garden, yard, park of civic property is a living picture. Each plant, ornament and accessory that is placed within this picture should add its part to the whole design. It is like the construction of a piece of machinery. Each part has its place in the operation of the machine. The development of the machine to perform a certain duty of duties is the ultimate object. And the same is true in the creation of the landscape picture; the overall picture is the important creative development.

Landscape designing is like the art of painting pictures. Two major differences are that the picture is actually in three dimensions, and that living materials are used in the development of the picture. The living elements are the trees, shrubs, vines, flowers and lawn grasses that the landscape designer uses to create his picture.

No beautiful landscape picture results from the thoughtless scattering of living plants throughout a yard area. These plant materials should be placed, using good art principles, in definite areas to create a pleasing design. In order to develop pleasing design much planning and thinking should go into the entire project before placing even one plant.

Frequently local service groups look around for a certain civic project that they might undertake and decide that the town needs a park. The city fathers donate an unimproved tract of land on the edge of town to develop. It is often a piece of ground with such uneven contour, or odd shape, that it is difficult to divide up into town lots without a great deal of work. That in itself should present no great diffiiculty. However, they decide that it would be too costly to secure expert landscape advice and go about planting the area according to the whims and fancies of the committee members appointed by the service group. Frequently, all or most of the plant materials are donated by town people or they are secured from the cheapest source obtainable. The result is a so-called park area that is planted atrociously designed. With a little more careful planning, and a little more labor or work expended, the same park could become a real show place for the town.

Good landscape design comes only from careful and thoughtful planning by persons qualified in this type of work. Few people would think twice about building a new house without securing the best plans available, and so it should be with landscape design.

Yellowing of Plants

Recent investigation with new chemical compounds may offer new methods of combatting chlorosis or yellowing in plants. In some parts of Montana, chlorosis, due to the unavailability of iron and other trace elements in the soil, has become a serious problem. It is not so much a problem of these trace elements not being in the soil, but as being unavailable because of the high lime condition of the soil. Soils having pH's running above 8.0 are quite common in eastern Montana particularly. Excessive amounts of lime in the soil tie up certain trace elements such as iron and manganese and even render a major element such as phosphorus to be present largely in an unavailable form to plants.

The remedy would be simple if we could lower the pH of the soil to a more favorable neutral reaction of pH 7. But this is easier said than done. Most plants grow favorably in soil reaction between pH 6.5 and 7.5. Some plants are able to withstand high pH reaction, but others are only partially tolerant of alkaline soils, while some will not thrive long in such soils.

A few acid loving plants such as blueberries, azaleas, cammellias, and rhododendrons, will not tolerate any lime. Plants manifesting chlorosis symptoms in soils of a high pH are members of the rose family such as apple, plum, roses, mountain ash, spirea, raspberries and strawberries. Perennial phlox, and other herbaceous perennials may show chlorosis. Even cottonwoods and poplars have shown chlorosis at high pH levels.

Plants which become chlorotic show a yellowing between the midribs of leaves. As the condition becomes more serious, the entire leaf surface yellows. Iron is a necessary constituent of the green coloring of leaves and a lack of it and other trace elements will cause this yellowing. A simple demonstration of the need for iron is simply to spray chlorotic foliage with a 1 per cent solution of iron citrate. If the chlorosis is due to lack of iron, the foliage will start coloring up within a few hours. Spraying with this solution has been a method advocated to control chlorosis. However, relief is only temporary, and on some plants burning of the foliage may result.

Two methods of approach have been used to cope with the problem. One is to treat the soil to reduce the pH to a more favorable level. The other is to treat the soil with soluble forms of the trace elements. In general, any treatments that have been advocated have been more or less temporary in providing relief from chlorosis. Some of the materials that have been used or applied to soils are sulphur, acid peat moss, ferrous sulphate, and aluminum sulphate. Gardeners having trouble with chlorosis should avoid using fertilizers having a strong alkaline reaction. Liming is a garden practice strongly advocated in the east but never apply lime to soils in Montana unless a soil analysis indicates the soil is acid in reaction. Maintaining a good supply of humus, such as heavy manuring, is said to help in buffering against high pH.

Two new products have been introduced within the last couple of years which have great promise in chlorosis control. One is a product called fritted trace elements. Trace elements, including iron, are fused with some glass-

(*Continued on page 74*)

ORCHARDING IN NORTH DAKOTA

by

R. L. WODARZ
Wyndmere, N. D.

Wodarz

It is my intention to describe briefly 15 of Dr. Hansen's apple introductions and the experience I had with them. I am of the opinion that most of Dr. Hansen's productions were not meant as a final product, but so many guide posts leading to a hardy, good quality fruit. Starting with the smallest useful apple, the Dolgo, I had experience with this more than 25 years. The tree is one of the hardiest for North Dakota and with me it yields heavily every other year. As to blight, it has blighted very rarely and that only on the tender new shoots, and this has been of very little consequence. One very important quality is that it is scab proof. Besides it being really the best jelly crab, some folks like the sharp sauce it makes. It is particular as to being top grafted. I have used Haralson, Caramel, Beacon and Crimson Beauty, with good success. Amur. This tree comes into bearing early and heavily. Some 25 years ago I had a Charlamoff, planted along the side of the Amur. The Amur would produce fruit almost every year. The Charlamoff would grow and grow with no sign of any fruit. This latter got to be a fairly large tree, the Amur remained dwarfed from heavy bearing. After some 12 years, Charlamoff got to bearing and crowded out the Amur, which had to be removed. Amur makes ruby-red jelly and it never showed any blight. Wakonda. In 1931 Dr. Hansen sent me some scion wood marked "Wakonda." This being Nevis x Northern Spy cross. Nevis should be the hardiest native crab apple. I had this tree growing for 17 or 18 years and it never got as high as my head. It blossomed and bore fruit every year. The blossoms are very fragrant, but the fruit was less than 2 inches across and a little bitter. Whether this would dwarf anything put on it I never found out as the winter before I was to topwork it, the mice cleaned up on it. Being grafted on a standard tree it will dwarf itself. It will blossom, bear fruit and grow very little wood. I have 2 year old rootgrafts of this with some fruit on them; the tree is perfectly hardy. Ivan. Tree is hardy, healthy and productive; no blight, so far; that's over 25 years. Being a prodigious bearer, the fruit may get below 2 inches unless the fruit is thinned. This is not one of the polished red fruits, but it is crisp, mostly red with about 90 per cent of calyx segments off. It is worth growing and it also takes grafts readily. Redflesh. The original tree sent me perished the second year and if I had not known how to graft maybe I would have thought this not hardy. Because this was something very new, I put a few scions on a small Hibernal tree, with this, and later on more trees, I found that the Redflesh tree is plenty hardy for our clime. With beautiful pink blossoms and a prodigious amount of red crabapples, with red flesh, it is worth while to give it a trial, especially in town, as the fruit is not palatable in its raw stage but is meant for sauce and red jelly. I never saw any blight on this. The seedlings of this variety are uniformly hardy and interesting and the red flesh shows up in many. Some are really deep red; more like that of a red garden beet.

Linda Sweet. Dr. Hansen described this fruit as a crabapple much russeted but what I got from him, the apple is rather smooth. One small branch produced russeted fruit, but this died out following the destructive winter of 1947-1948. The tree is hardy and comes into bearing very early; the fruit can be used for pickling, much like the old Sweet Russet crab. Unlike this latter the Linda Sweet will keep longer. On account of the greenish uninviting color, this variety does not sell readily; it is like a singed cat, better than it looks. Folks will have to be educated to the merits of Linda Sweet. Seedlings of this are interesting as they may be good sweet apples of fair size. No blight so far, but will lose practically all leaves during an epidemic of scab. The fruit ripens late in the season. Sugar Crab. It is claimed by some that sweet apples are more subject to blight and that may be so, but I must say I never saw this one blight. One fault it has, it is apt to overbear and carries the fruit in clusters and the fruit gets undersized. Otherwise the fruit is a good 2 inches in diameter and of a very pleasant taste; color is a pleasing yellow. Mercer. I got this more to get acquainted with the native American apple than anything else. This is hardy here and the fruit of very good size for a native crab. I would consider it worthless for fruit; it is bitter. The tree in bloom is wonderfully beautiful and the greenish-yellow apple will keep for a long time, as one grower said, "It will keep all winter in a family of young children." The tree has blighted a little during

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PRESIDENT'S MESSAGE

by

MRS. LEO MONTEITH

The Regional Meeting of the National Council of State Garden Clubs is scheduled for October 14th at Leavenworth, Kansas. Mrs. Fern Irving, Rocky Mountain Regional Director, invites any club member be present.

Perhaps your club may wish to help furnish the individual place favors for the banquet. Such little tokens might vary but each would bear the name of the individual club and state. Suggested items typical of our area might be pheasant feather novelties or dried materials. This would be an ideal way to share the abilities of our membership as well as to advertise your club and convey a message of good will from our state. I will be happy to take any such favors with me to the meeting.

Mrs. Walters, our national president, has asked that increased emphasis be placed on Regional meetings in order that many members who are unable to attend the National Convention may have an important meeting closer to their homes. Mrs. John Salis, National Chairman of Flower Show Schools, has tentatively accepted an invitation to speak on practice judging and point scoring. Included on the program will be a variety of timely topics including slides on hybrid lilies and demonstration of flower arrangement using dried materials.

If you plan to attend, send your registration with one dollar to Mrs. Fred Opel, 606 9th Avenue, Leavenworth, Kansas. For hotel or motel space, contact direct, Cody or National Hotel or Leavenworth Hotel.

The Regional membership project for 1953 and 1954 will be a unified effort to obtain a fifty per cent increase in members. If we can stimulate a few thousand new home owners in this region to "Plan and Plant for the Future," we will be doing a splendid service for our country and for posterity. Let us make some inspiration from it and cooperate by enrolling all the new garden club members we can.

The post convention board meeting was held on July 29 with a fine representation. Three newly appointed state chairmen made proposals of ideas in their fields. Mrs. Frances Bingen, Ways and Means chairman, reviewed a variety of material to be for sale by the state organization. Mrs. Milo Schulz of Huron, Junior Garden Club chairman, is willing to help any club to organize Junior Garden Clubs through the schools or your town. Write her for details. Miss Mildred Ibach, Garden Therapy chairman, has already contacted many clubs with helpful suggestions. Mrs. C. W. Moyer, Winner, South Dakota, Perennial chairman, states she has material available for topics on perennials. She will be glad to help you. That same evening a good crowd of South Dakota gardeners attended the Carl Starker Flower Arrangement Demonstration sponsored by the Madison Garden Clubs. Much credit is due Mrs. D. S. Baughman for getting Mr. Starker to South Dakota. His demonstration was outstanding.

Here is a list of most of the state chairmen for the coming year:

Awards—Mrs. George Jorgensen, Dell Rapids;
Publicity—Mrs. Albert Martinson, Brookings;
Membership—Mrs. Frances Nelson, Hurley;
Parliamentarian — Mrs. W. E. Drummond, Dell Rapids;
Birds—Miss Ruth Habeger, Madison;
Visiting Gardens—Mrs. Andrew Melham, Watertown;
Garden Centers—Mrs. Menholt Christensen, Hurley;
Garden Therapy—Miss Mildred Ibach, Sioux Falls;
Ways and Means—Mrs. Frances Bingen, Andover;
Conservation—Mrs. L. G. Elsinger, Dell Rapids;
Horticulture—Mr. J. M. Atkinson, Rapid City;
Slides—Mrs. Ross Oviatt, Watertown;
Legislation—Mrs. G. R. MacArthur, Huron;
Junior Garden Clubs—Mrs. Milo Schultz, Huron;
Perennials—Mrs. C. W. Moyer, Winner.

Has Your Garden Club Tried This?

Bible gardens hold interest throughout the world. Before man was, the vegetable kingdom graced the earth. Church gardens or home grounds may be made today, and thus afford an opportunity to study the plants known to the ancients who used them symbolically, with many of the truths coming down to us through the Bible. Probably the best place for a church garden might be adjacent to a church building. Eleanor A. King, in her book, "Bible Plants for American Gardens" (Macmillan), gives information on which would be most useful in the making of a church garden. A table of contents includes the following subjects: "the fig, the olive and the vine; fruit of the land; a garden of herbs; flowers of the field; land of the corn, perfumes and precious wood, reeds and rushes; thorns and thistles; and to everything there is a season." When we cultivate Bible plants or make a church garden these symbols live for us again in growing green vegetation. Even the trees mentioned in the Bible makes interesting specimens when planted in pots and used indoors. The vegetables and fruits may be used in many different ways, as table decorations for a dinner, as part of a menu for a meal, and as articles to be used for a church bazaar. As for flower shows, what could be more novel than one dealing only with Bible plants? As we study these symbolic plants, we want to grow them, and thus we will have a richer understanding of the Bible passages that tell of them. The New York Botanical Garden did a great deal of research and study a few years ago which culminated in an exhibit of Bible plants at the International Flower Show. A bowl of beautiful white narcissi, the

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HEMEROCALLIS

by

MRS. MARIE E. ANDERSON
Gowrie, Iowa

In July, 1946, The Midwest Hemerocallis Society was organized at Shenandoah, Iowa. This society is now International in scope and voted to drop the midwest from its name at its annual meeting at Shenandoah last July. It has now been divided into 10 regions, or districts. We who live in Minnesota, Iowa, Missouri, North and South Dakota and Kansas are included in district number one.

In order to learn more about the Hemerocallis, we—as a society—are sponsoring Round Robins. Mrs. Carl Marcue, LeMars, Iowa, is the Round Robin secretary. But, perhaps, I'd better tell you something about Round Robins, as some of you may not be familiar with their method of operating.

First of all, we appoint a person who knows quite a little about the flower to act as director of the Round Robin. She will plan the route the letters are to follow. Usually we consider 10 members as an ideal number for one Robin to have. The director starts the Robin out with a letter of introduction, telling something about her home, her family, her garden and flowers. In the case of the Hemerocallis Robin, she would tell something about how long she has been interested in Hemerocallis, also how many varieties she is now growing and which ones she likes the best of those. She then sends this letter on to the next on the list, who reads the first letter, and adds hers, then sends the two letters to the third one. She in turn repeats the process and sends it on. Each member adds her letter until the last one on the list is reached. This one sends the package of letters to the director, who removes her first letter and writes a new one—answering as many of the questions as she can and perhaps asks some of her own, thus promoting free discussion of the subject at hand. When Robin number two receives the package of letters, she removes her first one, replacing it with a new one, and sends it on—at the same time sending a card to the director, telling where she is sending the Robin. In this way the Robin can be located at any time. I have been a member of various Round Robins since 1941 and feel that this experience has been very worthwhile from both the point of friendships formed and the things I have learned from my association with my fellow Round Robins. Some of these things are of such nature that one would not learn them from the printed page. We have discussed the ethics and trade practices of various dealers, also learned that Hemerocallis are regional performers, and found that varieties that will do well here in the midwest may be perfect flops in the higher altitudes—as in Denver—and likewise in Florida's low altitudes some of the dormant types pine away and die, while if we purchase the evergreen types from the deep South we must mulch them in the fall to keep them from alternate freezing and thawing—a thing that is fatal to the evergreen Hems. And other thing we have learned is that when we do buy varieties from the deep South we should buy them in the spring of the year, if possible, so they get a chance to sink their roots into the ground and build up their reservoir of food in their fleshy roots before winter overtakes them. Late fall planting of Southern Grown varieties is highly unadvisable as they do not have time to become established before cold weather comes. We have learned that no matter where we live, the Hems that are originated in our own latitude will do the best for us. We in region number one are very fortunate in having such reliable hybridists as THE SASS family in our midst. Their Hems are created in our region and we cannot go wrong in buying them. There are many very good hybridists who live in other regions, whose products do very nicely for us. The main thing to remember when ordering Hemerocallis is that varieties originated in our own approximate latitude will undoubtedly give us better results than the ones who must get acclimatized before blooming. I have Hemerocallis in my garden from the Deep South that are now doing very nicely—but they took much longer to get established than the ones purchased from growers in our approximate latitude, and several of them have repeatedly proven tender here. Another thing to remember about Hemerocallis is that they do not give typical blooms the first year, and attain their height of perfection the third year after planting. Therefore, you should decide where you want to plant them, then let them grow undisturbed in this place at least three years before transplanting them.

While a light shifting shade is beneficial to the reds, purples and pastels, they do not thrive in a dense shade. They must have sunlight several hours daily to do their best. While many growers say that they will grow any place and in any soil, I have yet to see a flower more responsive to food and water. Lacking these essentials, they send forth just ordinary blooms—but given a nice, well prepared bed to sink their roots into—one that contains both humus and sand, and then given plenty of water and you will be rewarded with lovely blooms.

If any of you are interested in joining a Robin for the furtherance of the study of Hemerocallis, write our Round Robin secretary, Mrs. Carl Marcue, LeMars, Iowa. She will send you an application blank. As soon as this is returned to her she will arrange for you to be placed in a Robin where you can start studying this most fascinating of all garden flowers—the Hemerocallis. There are no charges for joining a Round Robin. All that is necessary is for you to like Hems and like to write letters. May we hear from you?

PRESIDENT'S MESSAGE—

(*Continued from page* 71)

"rose" of the Bible, would make a charming room decoration. The same is true of lillies, those familiar poppy anemones of the florist's shops and gardens. Indoor forcing will bring out the beauty of hyacinth and crocus, and the star-of-Bethelehem will shine brightly alongside these favorites.

Mebbe some of you faithful readers do not know they measure how smart a professor is, so I will tell you. If he is learning Agriculture, after four years he is supposed to know enough to tell you how to farm so they give him a degree which is called B.S. an you know what that is. Well then mebbe he studies some more an gets even smarter an they give him a M.S. which means more of the same. Now a few turns out to be extra smart so they give them a Ph.D. degree which means piled higher an deeper.—John Turnipseed, in PRAIRIE FARMER.

THE BEST LOVED TREES IN AMERICA

by

HARRIET MARTINSON
Brookings, South Dakota

South Dakota was originally a treeless plains area of long wavy grass, except for the Black Hills, lakesides and growth along the streams.

In 1951 a million trees were planted by the Department of Game, Fish and Parks through the Pittman Robertson cover development project. These trees were planted in 15 central treeless counties, more went into shelterbelts on farmsteads. We are becoming very tree-conscious in this state.

Advantages of the farmstead windbreaks are improved appearance of the farmstead, reduced fuel bills, protected yards and cattle shelters reduce feed consumption and make for more comfortable country living. Moisture is conserved by the slow spring run-off.

Black Hills Spruce was chosen as state tree by the State Horticultural Society at the Aberdeen convention in 1940. It is probably the most beautiful all around the year native tree and it gives publicity to the state in its very name "Black Hills" Spruce.

Cottonwoods are distinctly a prairie tree. They will grow in open country and on damp soil. They cover the Missouri River bars and bottoms and fill gravel pits and pasture lands. The Cottonwood grows quickly to produce a shade tree and it is used as the high point in much shelterbelt planting. Much timber has been used from this tree, it will grow on sub-marginal sandy ground: so it is second in volume of timber produced in the state. Major faults of the Cottonwood is short life and easy damage in drowth, by freezing, by excessive moisture, and by disease.

The *Green Ash* is most often found tree in old farm yard plantings in South Dakota. It is the predominant tree of all hardwood groves along the streams—except the Missouri River sandbars. It was basic tree for many "timber claims."

The principal commercial tree except spruce in the Black Hills is the *Ponderosa Pine.* In 1947 the State Legislature placed the pine forests owned by school and public lands and by the state Department of Game, Fish and Parks under intensive timber management. The law requires an annual timber harvest in the Custer State Park based upon sustained yield not to exceed 6,000,000 board feet. This program removes mature and dead timber and allows young growth to develop correctly over twenty year cycle. Farmers are depending upon agencies such as Game and Fish Department and Soil Conservation to plant trees and are ordering fewer themselves for bulk use.

Here are some odd facts about trees in other parts of the country. While California Redwoods and the Sequoias are the biggest and oldest group of trees in our country, Mexico is given credit for having the worlds biggest and oldest tree. It is the Tule Cypress of Santa Maria del Tule—six miles from Oaxaca in Southern Mexico, thousands of years old this Cypress tree is still green and vigorous, and its plump rounded shape looks like that of an oak tree. El Tule is so big that 28 people touching fingertips with arms outstretched can barely encircle the trunk. The trunk is about 112 feet around at five feet above ground with a diameter of thirty-six feet. It is only 140 feet high (not nearly so high as many of the conifers) but it has a branch spread of 150 feet. The Indians regard it as a sacred tree and have prevented scientists from boring into the tree to make age studies but it is estimated to be from 3,000 to 6,000 years old. 12 feet above the ground the Cypress bears a wooden plaque now overgrown almost but the Spanish words are partially decipherable. This board was placed on the trunk in 1803 by a famous German geographer and traveler, Alexander Van Humboldt.

Another odd fact about trees. How many leaves make up that green umbrella which protects you from the sun? Science says a gnarled old apple tree may have 100,000 leaves. A great New England Elm has more than 50 times as many. Nobody has yet counted the number of needles on a great pine.

MANITOBA NEWS LETTER—

(*Continued from page* 68)

others of the gardener's individual choice.

The third unit of the home grounds is the SERVICE area. It is connected with the kitchen door. Here is found the garage, car drive, clothes drier, garbage container, sometimes the well and, frequently, a small kitchen garden. This garden grows salad vegetables and rows of flowers to supply the house with table decorations. The first consideration in the service area is convenience. Next in importance is economy of space. A minimum area is to be taken up with drives. If entrance to the garage be from the street, it is well to have the garage situated near the house. The service area will extend back to the lane.

Foundation planting about the base of the house requires detailed thought. Plants are chosen to blend in with the architecture of the building.

"Tall, erect or pointed forms lead the eye upwards and break up wall spaces—adding to the apparent height. Low, squatty or domelike forms pull the eye downwards to emphasize width. Loose spreading masses merely fill in the space and soften the appearance."

The object of foundation planting is to blend the house, which is an unnatural object—with the lawn on which it resides. Shrubs placed along the base of the house ease the building into its setting making it a harmonious part of the scene. The shrubs are mostly fine-textured with smallish foliage which is medium to dark green in color. Subjects with brightly colored leaves such as red, yellow and silver are unadapted.

Usually a medium shrub is set at each side of the door. Some taller upright shrubs are set at the corners of the house. Upright shrubs are used between, and lower spreading types under, the windows. All coniferous evergreens make for a heavy rather gloomy effect. To lighten it, some deciduous shrubs should form a part of the planting. Where tall material is used it may well be banked with lower growing material. It is not desirable to hide all of the foundation. Open spots are reserved here and there to expose the building from the ground level upwards. Flowers may be grown in front of the house but it is preferable to have them backed with shrubs. Shrubs with freely suckering habit such as Russian Almond and False Spirea are not well suited. The suckers roam into neighbor plants and overburden the planting.

FRUIT AND VEGETABLE NOTES

by

F. X. WALLNER

Wallner

Hawaiian Sugar

The four largest islands of the Hawaiian group produce one quarter of the sugar grown on American soil. The cane fields of these 4 islands cover 220,000 acres. There are 28 plantations that provide year round work for 23,000 people, in the islands. Over one million tons of sugar is grown each year. Most all of this sugar goes to California; a little is left on the islands for local use.

Hawaii sugar history goes back more than a century, but not until the islands became American soil did sugar become a main crop. Sugar is a logical Hawaiian product; rich soil, abundant water and sub-tropic sunshine, grows heavy crops of cane. Sugar being a stable product, it can be moved over long sea distances without loss or spoilage. In sailing ship days Hawaiian sugar growers were many months from sources of supply and market. This isolation built among growers an enduring spirit of cooperation; growers shared with each other improvements in production. Without government aid they built great irrigation projects and established their own export organization. The pioneering of Hawaiian sugar producers has provided Hawaii with its largest industry and this same pioneering has given Americans a dependable source of sugar produced by people whose wages and working conditions are typically American. Most all the plantations seem to be near the coast line; Moui has only three, one in the west and two in the north center. Oahu has four, two on the northern coast and two in the south; Kaui has 10 almost surrounding the outer part of the island, except in the north and the island of Hawaii has 14 large plantations on the eastern slope and in the south.

Growing the sugar cane takes 18 to 24 months, before it is harvested. On irrigated plantations, all fields are planted on contour to halt soil erosion. Most of the first plowing goes 24 inches deep, then disk plowing, for smoothing down the seed beds. Short stalks of cane are called seed and are planted by machine. Cultivation and spraying control the weeds and cane fields are set afire just before harvest to burn off all the dry leaves and trash. Cane roots in the ground and produces next year's crop. Hauling to mills is now done by large trucks, but the small railroad cars still are used in some districts. Two to four crops are grown before the field is plowed and a new crop planted. The sugar mill is an interesting place where loads of cane are dropped in the washing bins, then milling and squeezing out the juice, heating the juice, clarifying, filtering, evaporating, crystalizing, and then trucking the raw sugar and blackstrap molasses to port warehouses. Then large belt machines load it into large steamers for the plant in California.

About 65,000 tons of raw sugar is refined near Honolulu for use in the islands. "Community Life," each of the 28 sugar plantations of Hawaii is a community. Here are the homes, schools, hospitals, stores, churches, theatres, community buildings, clubs, playgrounds and recreation fields for plantation employees and their families. Schools measure up to American standards, most all children finish high school, a half million people call Hawaii home, 70,000 of them live on these plantation homes. Hawaiian towns and stores look like mainland towns and stores. The stores carry the same brands of food, clothing and other wares found in the states. Hawaiian sugar growers own their own refineries in California in Crockett, on San Francisco Bay. This is the California and Hawaiian sugar refining corporation, more widely known as C & H. C & H sells about 80 per cent of the raw sugar and also markets the molasses produced by the 28 plantations.

Over 3,000 wholesaler buyers in the western two-thirds of the United States market Hawaiian sugar. 85 per cent of the sugar refined at Crockett takes the form of granulated sugar, the other 15 per cent is made into sugars of numerous kinds.

A year's crop of Hawaiian sugar would fill a freight train 200 miles long. Hawaii spends more than 300 million dollars yearly for mainland goods, an average of $60 per capita, making the people of Hawaii the best of share customers in the world for the products of mainland farms and factories. The first mention of sugar comes from the early writings of India. The art of evaporating cane juice to make crude crystals developed along the Ganges in India about 400 A. D. Mountain climbers, long distance swimmers use sugar as a source of quick energy. In Hawaii most of the cane fiber is used as fuel in plantation mills but a number of types of wall board are being made. The value of the Hawaiian sugar crop in 1951 was over 136 Million dollars. The plantation pay rolls were over 60 million dollars. The industry pays the highest year round agriculturist wages in the world to its production laborers.

YOUR YARD AND GARDEN

(*Continued from page* 69)

like compound. These trace elements are in more or less insoluble form, but the manufacturers claim when this substance if mixed with the soil, the trace elements become slowly available to the plants. The other product is known as chelated sequestrenes. One compound contains iron and another manganese. Preliminary tests at Bozeman with potted plants indicate that these chemicals may have considerable promise.

Gardeners must remember that yellowing of plants can be due to other causes. Recent heavy rains in some areas of the state have caused a temporary waterlogging of heavy soils. Such soils are not properly aerated, and plants growing in them may become yellow, or may even wilt and die. Low amounts of nitrogen in the early part of the growing season due to cool, backward weather will cause plants to yellow and show lack of vigor. A little side-dressing with a nitrogen fertilizer will perk them up.

Asparagus,

A Popular Perennial Vegetable

Asparagus is our most popular perennial vegetable. Because it is easy to grow, and is one of the first vegetables in spring, it should be in every garden.

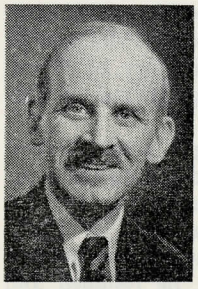
It is not difficult to establish a planting of asparagus. Figure on twenty plants per person, or less, if the plants

(*Continued on page* 80)

WHAT'S THE LATEST NEWS IN ROSES?

by

PERCY H. WRIGHT



Wright

When I write, especially for the readers of Dakota Horticulture, as I always do, I feel at liberty to give information of a kind that the editors of ordinary agricultural magazines might not appreciate. Why do I feel in this way? Is it because the editor of our magazine is a superior fellow? Perhaps he is, but that's not why, for he would not be a good editor if he were in less close touch with his readers than the run-of-the-mill editor is. No, it is because I believe that the readers of this magazine are themselves interested, not only in practical "how to do its," but also in the more technical aspects of the subject that draws us all, and especially in plant breeding since plant breeding holds the key to the future.

The title at the head of this article is probably misleading, since I do not know what all the other rose breeders are doing; it is meant to cover only the progress made in rose breeding on my own place in recent years. I am, of course, not by any means alone in working with hardy and semi-hardy roses. The Morden Experimental Station has an active project, which stresses the hybrids between tender roses and the super-hardy species Altaica. This is a grand way to get quality in the rose flower, for Altaica descendents all seem to have a tendency to be of better form and substance than the hybrids of any other wild species that I know. However, it is remarkable how little of the superb hardiness of this mountain species passes down to its hybrid progeny. The labors of the Morden Station will probably be of greater benefit to the people of the states, especially of the Dakotas, than they will be to us here in the extreme north of the prairie provinces; that is, its roses, by which I mean those already named, will tend to go from Morden south rather than from Morden north. The work of Dr. F. L. Skinner at Dropmore, and of M. Georges Bugnet of Gunn, Alberta, is more often conducted with plant characters rather than flower characters in mind, and more closely parallels my own.

Actually, the ordinary "hardy" roses which we know so well, Hansa, Tetonkaha, Betty Bland, and Harison's Yellow, are not completely hardy, though of satisfactory hardiness in most winters. A great deal depends upon the nature of the soil, its fertility, and its moisture content in the autumn months. On my former muskeg soil, rose wood has the same difficulty in attaining proper maturity before the heavy frosts of late fall as has apple wood or plum wood, and winter survival is often determined by the amount of maturity attained rather than by the amount of cold endured during the winter. In the fall of 1951, for instance, winter arrived on October 14, after a warm period in late September and early October that failed to encourage maturity as usual. The result was that Hansa killed to the ground line, as did most of the Rugosa hybrids, although Mrs. Anthony Waterer fared considerably better than Hansa. Tetonkana also suffered, and Harison's Yellow too (though killing to the snowline is the regular thing for Harison's Yellow on my soil). Betty Bland lost a great deal of its older wood, but the wood of the production of the summer of 1951 survived fairly well.

This behavior of Betty Bland was in accordance with the behavior of the species Blanda. I have a strain of Blanda which I secured from the province of Quebec, near Montreal, where the winters are nearly as severe as at Morden, and it behaves just like Betty Bland. It is no hardier, and loses the old wood, that is, ages prematurely, just as Betty Bland itself does. Of course, all rose plants lose the old wood eventually, even the wild roses, but when a plant is completely hardy, the wood must be very old before it does, ten years or older. However, Betty Bland wood will die when only two or three years old, sooner than will Hansa wood, although in general I would say that Betty Bland is hardier than Hansa. It is odd, right after my explanation that lack of maturity in a moist, growthy soil-area affects roses as well as other shrubs and trees, to be noting an exception in Blanda and hybrids, that with them it is the young wood that lives.

But I must tell you about at least one of my recent new roses. This is Quadroon, a very unusual little rose of unknown descent, except that I know that it mixes the genes of Hansa and Nitida. Nitida is a dwarf species native to the New England States and the Maritime Provinces of Canada, which has shiny foliage in summer, and beautiful fall coloration of the narrow leaves as summer ends. The flower is small, a medium-toned pink, but non-fading, and without objectionable blue tones throughout its life. Quadroon has inherited the deep, deep color of the Hansa petal before it has been exposed to the sun, plus the non-fading of Nitida. The result is a rose of remarkable color, a rich, velvetty crimson of deepest tone. It is a pity that the flower is small, and single. However, its pollen is fertile, and the plant will even set seed, and so there should be no insuperable obstacle to the transference of the deep color to large, double roses of good form. Such a rose would be a prize indeed.

As time goes on, my ideal rose becomes more and more a non-fading one. I do not like "rose" roses very well, for the color rose has considerable blue in it, and when the red element fades out, the blue element, less subject to fading, remains, and gives the flower a most objectionable violet tone that is anything but beautiful. Yet such color is the inevitable result when we use the common native roses, Macounii and Blanda and Acicularis, as parents, in any proportion that makes their genes dominant. Unfortunately, Nitida has defects too, and it will take considerable work to get the desired gene for non-fading to descend to its hybrids without also getting the Nitida gene for very weak flower stem, covered, like the hep itself, with bristles. Since Hansa itself has a very short, weak flower-stem, though a stout one, the combination makes for a very weak stem indeed.

The question that I want to have answered as soon as possible is this—Will the gene for non-fading which we have in Nitida prove effective in delaying the fading of yellow in the "rose" petal too? If so, we are in luck.

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SECRETARY'S CORNER

by

W. A. SIMMONS

W. A. Simmons

What a wonderful thing is science and how could we ever do without it!

First they gave us fertilizers to replace that the regular fertilizer manufacturers formerly made for us on the farm, fertilizers so good that they fairly made our lawn grass sit up all night to grow, and now they have given us a chemical to slow down the growth, so we can catch up with it with the lawn mower. On the whole, the weather man has been good to us this summer. True, for some time he played hard to get with us in the way of moisture, then tried to make up for it by pulling the plug and letting it all run down on us in one operation, to save overhead, evidently. Then he gave us many nights so hot as to make night shirts obsolete, probably thinking of the needs of the corn crop, but we have had a lot of lovely weather which we that stayed home enjoyed, and even some of those that rashly ventured out on the highways during tourist season, came home in one piece and lived to tell the tale.

"If I never see the results of another tornado," writes the noted tree specialist Mr. E. H. Scanlon in his magazine "TREES," "it will be just dandy with me. One hit Cleveland on June 8th.—5000 street trees wrecked on 100 miles of street extending in a diagonal line half-way across the city. Thank heavens for the chain saw. One observation seems pertinent—the trees seemed to absorb the first and worst shock, and houses, where there were trees seemed to suffer less damage than where there were no trees. Where there were no trees the houses were completely demolished or badly wrecked. An intensive program of replanting small tailored trees on the denuded streets—at the proper and adequate spacing is scheduled to begin this fall." Mr. Scanlon advocates the planting of smaller growing trees, "blended to fit the space available, and reduce conflicts with sewers, wires, street lights and sidewalks" and abandon the planting of old outmoded forest giants, in our cities. When one looks at the pictures he presents of the confusion created and the damage done by the fall of the old giants, one must agree, that he has an important point there, especially as we can't keep the tornados from striking our large cities. Whether they are caused by our army, playing with their atomic bombs, as some seem to suppose, or not, we have always had them to some extent, though I can't remember a year when there were so many of them, and they did so much damage and killed so many people.

Just now, I am enjoying that wonderful early eating apple the Melba. Though scarred up by hail and sometimes over populated with worms, they have a lot of the McIntosh flavor and are tops for an early season dessert apple. In scanning the catalogs that come to my desk, I am amazed that this "hardy as an oak" apple is not propagated by our midwest nurserymen. Some time I received a letter by one of our members enquiring where they could buy these trees and was forced to direct them to a Michigan nursery, as I could not find it listed by any of our near-by nursery firms.

A letter from his daughter, Mrs. Fred Hansen, Rt. 1, Wolsey, tells of the passing of Mr. B. F. McBride in July. He had been a life member since 1924, so there was no question about his getting his money's worth. Mrs. Hansen sent in a check to pay for an annual membership for her brother, Robert McBride. She enclosed a photo, showing the improvement Mr. McBride made in the bare location he found when he established his home there so many years ago. We are very sorry also to report the passing of an old friend and fellow life member, Mr. E. C. Hilborn, of Valley City, North Dakota. In sending me the notice that appeared in the FARGO FORUM, which follows, Mr. Graves adds: "He did a great many things well. One of the leaders in organizing the North Dakota Society as it now exists. Some younger fellow will have to move in."

"Valley City, N. D.—Ernest C. Hilborn, 76, Valley City businessman, died recently in a local hospital. He had been in ill health since last March.

"Ernest Carroll Hilborn was born at Ripon, Wis., Dec. 31, 1876, and was educated in the schools of Appleton, Wis., and Little Falls, Minn., moving to the latter city when he was 12.

Later he came to North Dakota and attended Valley City Normal School, being graduated there in 1903 and in 1905 from the University of North Dakota, where he specialized in botany.

Mr. Hilborn taught school several years in the state and during the summers he sold nursery stock for the Jewell Nursery Company. In 1908, while he was superintendent of schools at Enderlin, N. D., he resigned and launched the Northwest Nursery Company, with offices in Valley City.

As the firm prospered, Mr. Hilborn was actively interested in the Northern Retail Nurserymen's Association, which he served two years as secretary and two years as president. Later he was president of the national group, the American Association of Nurserymen. He also served as chairman of important committees, including the market development committee.

He contributed articles on landscaping and allied subjects to "Farm Journal" and "Better Homes and Gardens" and also wrote a series of articles on horticulture and a popular booklet "Amateur's Guide to Landscape Gardening."

Active in the First Congregational Church, he served on the board of trustees and was superintendent of the Sunday School more than 15 years. He had served on the building committee which served for the building of the church structure now in use.

A charter member and past president of the Valley City Rotary Club, he was a past president of the Commercial Club and a promoter of the Valley City Chautauqua Association, having served on its board of directors.

He was a member of Phi Delta Theta fraternity at NDU and had been a member of the Masonic Lodge. He also served on the alumni boards of NDU and of Valley City STC. During World War I he was a "Minute Man" aiding in the sale of war bonds.

His hobbies were photography, plant breeding, school athletics, hunting and fishing.

He married Grace Washburn at Orford, N. H., August 5, 1908. Miss

(*Continued on page 77*)

GARDEN CLUB GLEANINGS

by

MRS. R. G. FERRIS
Route 3, Sioux Falls, So. Dak.

Garden Club activities are many and impressive and flavored with public-spiritedness, as the following news items well attest.

One of the hardest working clubs seems to be Dell Rapids, who sponsored their third flower show of the season, August 11. A "Glad Day"—with over 80 classes judged—200 entries—sweepstakes and a Carl Starker table for those who attended his lecture. A busy summer for this club with 3 flower shows, tour of Sioux Falls parks and picnic, one breakfast, Arbor Day tree plantings, and all regular meetings each month.

Mitchell Garden Club sponsors 6 judged flower shows a year in the Mitchell National Bank lobby. Probably 100 entries in the August show. They plan to join the Federation next year.

The Yankton Garden Club's annual flower show, with emphasis on Gladiolus had visitors from 5 states and 36 towns. Keen interest was shown in the new varieties exhibited in the specimen section, and in the arrangement section such new material as cucumber tulips, tomato roses, squash flowers, lotus blossoms, sea lavendar and rhubarb curls were seen.

Flower lovers of the Mobridge area observed one of the largest displays of flowers and plants ever exhibited at the annual show of the Mobridge Garden Club. A total of 269 entries contributed by 74 exhibitors were viewed by visitors from 30 different communities in that area. Timber Lake again won the gold loving cup, awarded annually to the neighboring town which enters the most displays at the show.

At the late summer show put on by the Lyons Club, 114 entries were on display. Mr. and Mrs. H. N. Dybvig of Dell Rapids judged the show. Four door prizes were given at the close of the evening, and visitors were present from many of the neighborhood towns.

"Love in Bloom" was the theme at the open house held by the Garden Gate Garden Club at the home of Mrs. John Bushfield in Miller. Floral arrangements represented an entire wedding party, including the bride and groom, their attendants, ushers and parents. A country cousin, an aunt and uncle and others were portrayed as guests at the wedding. The old tradition of something old, new, borrowed and blue was carried out in the arrangements. Dainty refreshments were served and the free silver donation will be used for civic improvements.

Mrs. Albert Hellekson, chairman of the Hoe and Hope Garden Club of Volga sent in a history of their club, which was organized in November, 1951, and already has had two flower shows and the proceeds of nearly $55 was sent to the Crippled Children's Hospital in Sioux Falls. Garden Therapy is their project. They bring books on corsage making and material to the shut-ins and handicapped, and flowers to the sick. Many fine meetings with competent leaders have been held on Horticulture and flower arranging.

The Community Gardeners Club of Timber Lake sent in their new officers, with Mrs. Glen Darling as president; and Mrs. Clarence Brown heads the list as president of the Green Fingers Garden Club of Flandreau.

The Sunshine Garden Club of Highmore made plans for their flower show. They will be assisted by The Country-Side Garden Club.

Mrs. Gladys Severance of the Fair City Garden Club of Huron writes of the many activities of their club, as the eight o'clock breakfast in Riverside Park and afterward touring six of Huron's beautiful gardens, where the hostesses told of her methods of gardening and named varieties. It was a very interesting and instructive tour. July 29 twelve members went to Madison to visit gardens, have dinner together and attend the Carl Starker lecture on flower arrangement. "Indispensable Annuals," was the topic for their last meeting. On a wide table were 30 bouquets and arrangements of annuals. Mrs. Carl Metzger conducted a contest to see how many could correctly name them all. This was the first year some of the annuals were on the market. Those who had grown the annuals answered any questions concerning them. Mrs. Erick Dietrick explained the cross fertilizing of gladiolus and showed a number of seedlings in blossom, and their parent glads. Mrs. Severance explained the classification of glads according to size, color and scale.

Cucumbers, muskmelon, onions, peppers, plums, apples, chrysanthemums, asters, phlox and monochromatic arrangements filled the Brookings Armory-Auditorium. The occasion was the annual "Autumn Harvest" flower and vegetable show sponsored by the Brookings Garden Club. Veteran club members point out the exhibit started about 10 years ago in a "Brookings Garage," and today has grown to such proportions the Armory facilities are taxed. The next issue of the magazine will carry a full report of this show which was held Aug. 29.

W. A. Simmons of the Sioux Falls Club writes, "The club met in the fountain room of Fenn Bros. this evening for a 6:30 picnic, there being 40 present. Fortunately, some of our gals had been there before, so they knew just where the ice cream was located and were not at all bashful about dishing it out. It was a wonderful treat, and the prospect of it brought out some members we had not seen since Towser was a pup. If the other Sioux Falls Garden Clubs don't avail themselves of this fine treat, they are too slow for any use."

WHAT'S THE LATEST—

(*Continued from page 75*)

There are, by the way, genes for interesting effects on flower color to be found in two other species also, and luckily, these are both hardy. They are Rubrifolia, the red-leaved rose from the Alps, and Suffulta, the very dwarf, very drouth-resistant little rose that is such a weed in our own wheat fields. When we consider that these genes should be able to increase the quality of our tender roses, as well as the range of color of our hardy roses, we realize that a wealth of material in the rose genes is yet to be exploited.

SECRETARY'S CORNER—

(*Continued from page 76*)

Washburn had been high school principal at Enderlin, N. D., while he was superintendent of schools there.

Besides Mrs. Hilborn, he leaves two daughters, Mrs. Richard J. (Edith) Layton, Valley City, whose husband is manager of the Northwest Nursery Company, and Mrs. Raymond A. (Ruth) Nelson, International Falls, Minn., and six grandchildren.

ORCHARDING IN N. D.—
(*Continued from page 70*)

2 years, but only on the current year's wood. Bismer. It being a cross of the large Bismarck x Mercer crab, it is hardy and productive here, and fruit ripens late in the season. If the tree is not overloaded, the individual fruits will reach a pretty good size, up to better than 2 and one-half inches. The brown-red color and yellow flesh may deter some folks from buying it. I do not consider this a crisp apple, still it is pretty good quality and keeps for a while.

Anoka. There is not very much for me to say about this well known variety, only that it did not fruit as early for me as claimed. It is considered blight resistant, however, I must say the first few trees I got showed some blight and this took one tree clear down to the ground. But it started again from the stump and made a tree again in a short time. Fertile soil and plenty of moisture must have been the cause of the blight, as I have never had that trouble since then. It is short lived, the cause being partially, at least, its early heavy bearing. As to quality, some people like this apple when fully ripe, or for sauce before the fruit gets mealy. Unlike the Dutchess, the fruit on the Anoka ripens more evenly. Wakpala. This is one of the very valuable Hansen's introductions; if it only had a good red color I am sure it would be grown more extensively. It seems hardy here and it also has an early bearing habit and the spicy taste is quite pleasing. It can be used to advantage for pie filling. It never showed any blight. We should raise more Wakpalas. New Duchess. I compare this with our Duchess of Oldenburg. There is not much difference between the two. New Duchess bore heavily of fine fruit. The year when scab was bad, I noticed that our old Duchess was resistant while the New Duchess lost most of its leaves. Scab is not much of a problem in North Dakota, so this would not be much of a drawback. A storm broke down my New Duchess. Caramel. This one proved hardy and prolific, but one must not let it grow too rapidly as it is apt to blight. The fruit is sweet and pleasant to eat, but the color is not attractive. People like this fruit after they get acquainted with it.

Russian White. The fruit is rather odd, as it is white rather than yellow, and of good size. The tree is a good grower, healthy and so far, free from blight. Unless one is very apple hungry, he would not care to eat it out of hand, though it makes good sauce. I have one of them, or rather part of one, grafted to Milton, with good success. Adno. Adno is a large red apple and it has a fine appearance. The tree is hardy and a good grower, with large leathery leaves. It's prolific in bearing, but the fruit is not of the best dessert quality. Here is a fruit that should lend itself to extensive fruit breeding. This is a late fall apple. Our secretary, Mr. H. A. Graves, mentions in the May AMERICAN FRUIT GROWER, the 3 new varieties of apples that were introduced this spring. As two are seedlings of Hansen's apples and the third has as its pollen parent a Hansen apple, I want to say a few words about them. Reta. It is a McIntosh seedling and at that time there was a Sugar crabapple growing in the same orchard, and I believe it crossed with the McIntosh. The flavor of this fruit reminds one of the Sugar crab. It is not an early apple. Richland, on the other hand, is an early ripening fruit, keeping quality being that of a Whitney. It still puzzles me what the pollen parent could be. Adno, its seed parent, ripens late in the season. The two are growing on their own roots and we are wondering how they will perform on grafted hardy roots.

The Cranberry crab has been experimented with for a number of years. This tree is very hardy and it has never shown any blight. On its own roots it is rather spreading and thorny. When rootgrafted, it takes on a little more upright growth and for some reason, most of the thorns disappear; it also comes much earlier into bloom. In 1946, when we had that hard freeze the middle of May, it carried some fruit. Dolgo and other Bacatas were entirely devoid of fruit. This is a seedling of Dr. Hansen's Redflesh x Elk River crab which may have had something to do with the Cranberry crab having some fruit that year. Here are some of the other apple varieties that I have growing on my farm. From the Minnesota Fruit Breeding Farm: Beacon, Prairie Spy, Wedge, Minjon, Fireside and Haralson. From the New York State Fruit Testing Association: Red Sauce, Melba, Kendall, Milton, Orleans, Medina, Early McIntosh, Webster-triploid and Redfield. Other varieties: Wealthy, Duchess, Charlamoff, Lowland Raspberry, Whitney, Sweet Russet, McIntosh, Okabena, Keetosh (from Canada) and Virginia.

Then there's the story of the draftee who left for duty in Iceland with two aims—to kiss an icelandic girl and to shoot a polar bear. Recuperating in an Icelandic hospital he confided to his buddy: "I guess it would have been better if I'd tried to shoot the girl and kiss the bear."—BOSTON GLOBE.

GARDENING TIPS

from

PRAIRIE FARMER

Controlling Insects

Insects will cause you a great deal of trouble unless you are prepared to deal with them. Tender sprouts make tender feeding for these pests.

Some plants have considerable resistance to insects, but others are almost certain to be ruined unless they are dusted with an insecticide.

There are many different kinds of insects in the garden that will give you trouble, and it is difficult if not impossible for the average gardener to fight each of these insects individually with the spray that does the most effective job of exterminating them.

So since we can't hope to cope with all of them, the next best thing is to keep a couple of the most effective insecticides on hand.

It is also important that you use insecticides that are harmless to humans, unless you are going to do an unusually good job of controlling the effects of spraying or dusting.

The two dusts that probably come closer than any to doing an all-around insect control job and that are relatively harmless to humans, are a five per cent DDT dust and a .75 per cent rotenone dust. A cheap hand duster will help you do a better job.

If applied properly and at the right time, rotenone dust will control cabbage worms, cucumber beetles, flea beetles, potato beetles, aphids (except cabbage aphids), and cabbage borers.

Dust vine crops for cucumber beetles as soon as the seedlings come up and repeat when the beetles reappear. Dust plants for flea beetles when small round holes appear in the lower leaves.

There are other materials in the market like lindane, methoxychlor, and nicotine dusts, that are relatively safe to use. There are some like pyrethrum and the arsenicals which require considerable care because of their poisonous effects on humans.

One of the newest insecticides is malathon, which promises to answer some of the tough problems in garden insect control, according to John Schoenemann, University of Wisconsin horticulturist.

Schoenemann says malathon will play its biggest role in controlling garden aphids. It is also good against cabbage worms and cucumber beetles. Malathon will serve as an all-purpose garden dust. It will cost a little more than DDT or rotenone, but malathon will do more jobs. It is a lot safer than parathion, but precautions must be taken as with any chemical insecticide.

Malathon is generally available for gardeners this year. Four per cent dust is recommended. Malathon can be used on flowers, especially for mites and red spiders.

Don't use any of these chemicals, DDT, chlordane, or lindane, for 30 days before harvest on leafy vegetables like lettuce and cabbage. Be sure the vegetables are washed thoroughly before using if they have been sprayed with a chemical insecticide.

Except in a few cases, proper application of rotenone and DDT will give excellent control of garden insects.

Aphids, which attack most garden crops, can be controlled with a three per cent nicotine dust, rotenone, or lindane. The blister beetle, which feeds on potatoes, tomatoes, and spinach—DDT. Cabbage worms which prey on cauliflower, cabbage, and related crops —rotenone and DDT; use rotenone instead of DDT if the heads are well formed.

For the corn earworm, usually found in the sweet corn ear—DDT and rotenone. Rotenone can be applied in a mineral oil solution to the silks five to seven days after they appear. Clip the silks six days after they emerge. Eggs are laid in the silks.

The striped cucumber beetle will make short work of your melons, cucumbers, and pumpkins unless you dust with a rotenone-sulfur mixture or a lindane dust. Use DDT sparingly. DDT or chlordane around the base of plants and on the stem just above the soil will control the cutworm which attacks most garden crops.

The flea beetle, which feeds on most garden crops, can be controlled by DDT and methoxychlor. Methoxychlor can be applied as a wettable spray with five to eight teaspoonfuls of methoxychlor in one gallon of water.

For squash bugs, which you will find on all vine crops, dust with 10 per cent sabadilla or five per cent chlordane spray, with four teaspoons of 40 per cent wettable chlordane in one gallon of water. The Mexican bean beetle can be taken care of with a .75 per cent rotenone-sulfur dust or eight teaspoonfuls of 50 per cent wettable methoxychlor in a gallon of water.

"Doc," said the old mountaineer, leading a gangling youth into the presence of the village medico, "I want you should fix up my son-in-law. I shot him in the leg yesterday and lamed him up a mite." "Tut, tut," clucked the doctor disapprovingly, "shame on you for shooting your own son-in-law." "Wal, doc," rejoined the mountaineer, "he warn't my son-in-law when I shot him."

—WALL STREET JOURNAL.

If you take flowers to the sick, you perform a kindness and give much pleasure, but if you teach that sick person to grow a beautiful flower or vegetable, tree or shrub himself, then you are helping to heal a sick body and mind, and that is garden therapy. —Mrs. G. C. Spillers, *in* NATIONAL GARDENER.

A laconic biography of Socrates was offered by one grammar school boy. What his composition lacks in detail it makes up in point. He wrote: "Socrates was a great man. He was a Greek. He went around telling people what to do. They poisoned him."

—THE EARTHWORM

Before the cage of a kangaroo stood a young lady, stunned. Near the cage was a sign which read, "Native of Australia." Disheartened, she turned away and cried, "To think that George threw me over for one of those things." — WISCONSIN HORTICULTURE.

As the base of the house is a most trying location, material of great hardiness is chosen. Moreover, shrubbery used in foundation planting tends to weaken early in life. Plan to replace it with young, vigorous stock every 10 to 15 years.

One of the best face saving methods is keeping the lower half shut.—GLEN SCHRADER.

YOUR YARD AND GARDEN—

(*Continued from page 74*)

are to receive optimum cultural care. The plants may be grown from seed, or from one-year old transplants. If grown from seed, sow the seed in the ground in early spring about 1 inch deep, and later thin the plants so they are from three to four inches apart. Transplant the next spring to the permanent location using only the stronger roots, discarding the remaining.

If you are establishing the permanent planting, use strong, one-year old nursery grown roots. Older roots are not as desirable, since there is greater damage to the root system when they are transplanted. The ground should be ploughed deeply before planting the roots. Incorporate some well rotted manure and phosphate fertilizer when preparing the soil. Set the crowns so the buds are from six to eight inches deep, and make sure the roots are well spread out. Fill the planting only to about three inches from the surface, and cultivation will gradually fill the holes later. This allows the crowns to become established quicker. Space plants about two feet apart in the row, and if more than one row is needed, between the row spacing should be about 4 feet. Wider spacing may be better under dryland conditions.

In order to develop strong root systems, no harvesting should be done the first two seasons after planting the one year old roots. The tops should be allowed to grow through the entire season. The tops may be removed in the fall, or it may be more desirable to leave them until next spring. Leaving the tops on the plants over winter, aids in catching more snow during the winter months, and good snow cover aids greatly in protecting the asparagus crowns and roots.

It is important not to allow weeds to become established in asparagus beds. Cultivation, by running a blade just under the surface of the ground, just after harvesting spears, assists greatly in controlling weeds. This may damage a few spears that have not appeared on the surface, but for the most part damage will be negligible.

Ordinarily the asparagus cutting or harvest season should not continue more than two months. It should start as soon as the first spears poke through the ground in the spring and should continue at three to four day intervals for about two months. After the cutting season, the plants are allowed to develop top growth and this should not be disturbed during the remainder of the season.

An annual light topdressing with well rotted manure and phosphate fertilizer will help keep plants vigorous and productive. The fertilizer should be applied early in the spring and worked in well around the plants. Plenty of water during the harvesting season, will aid in obtaining maximum production of excellent quality spears.

Mary Washington has been a popular old favorite variety. Paradise is a newer variety that has gained much in popularity. Seneca Washington, Minnesota 4-Way Cross and California are new varieties being tested at the Experiment Station at Bozeman.

ABSENT MINDED

"Imagine my embarrassment," said Dumb Dora, "when, according to my usual custom, I looked under the bed before retiring. I had forgotten that I was in an upper berth."—WISCONSIN HORTICULTURE.